

# **DART SERVICE INSTRUCTION**

TO AMEND INSTALLATION INSTRUCTIONS IIN-D119-646 REV. B  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D119-646 REV. 1  
REF FAA STC: SR02024SE

## **1.0 PURPOSE**

To add the D119-646-451/-452 Wearplate Kits for Agusta OEM skidtubes. The kits consist of full length stainless steel wearplates with hardcoat welds to replace the existing OEM wearplates and provide full length wearplate coverage similar to a Dart replacement skidtube.

DART KIT	COMPATIBLE WITH AGUSTA SKIDTUBE
D119-646-451	109-0570-03-109 (LH) M031-01S006-043 (MkII LH)
D119-646-452	109-0570-03-110 (RH) M031-01S006-044 (MkII RH)

## **2.0 INITIAL INSTALLATION**

The D119-646-451/-452 Wearplate Kits should be installed as follows. Refer to Figure 1 of this service instruction for reference:

- 2.1 Jack up the aircraft. At the installer's discretion, remove skidtube from the aircraft per Aircraft Maintenance Manual to allow for easier installation of the wearplates.
- 2.2 Remove the existing OEM wearplates as applicable
- 2.3 Check for corrosion and mechanical damage on the bottom of the skidtube in accordance with the Aircraft Maintenance Manual and repair as required.
- 2.4 Temporarily locate/clamp the D4132-041/-042 Fwd Wearplate and D4134-041/-042 Aft Wearplate on the skidtube and transfer drill Ø0.343" from the saddle to the inboard wearplate tab.
- 2.5 Temporarily locate/clamp the D4133-041 Mid Wearplate on the skidtube between the D4132-04X / D4134-04X wearplates. Mark and transfer drill Ø0.297" to the skidtube (32 places).
- 2.6 Touch up paint finish as required per the Aircraft Maintenance Manual.
- 2.7 Install AELS-1032-XXX inserts (32 places) in Ø0.297" holes as shown in Figure 1 of this service instruction.
- 2.8 Install the D4132-041/-042, D4133-041, D4134-041/-042, and qty(3) D4135-1 Wearpads as shown in Figure 1 using AN3C hardware as shown. Fasten the fwd/aft wearplates to the saddle using existing hardware. It is recommended that the fasteners are installed with Sikaflex-241/-291, Proseal 890, or MIL-S-8802 Class B2 sealant.
- 2.9 Seal wearplates using Sikaflex-241/-291, Proseal 890, or MIL-S-8802 Class B2 sealant as required.
- 2.10 Re-install modified skidtube (if removed) on aircraft per Aircraft Maintenance Manual. Lower the aircraft.

B	ADD: RMV/RE-INSTL PROC, REF TO MKII SKIDS, RMVL OF SKID DURING INSTL NOW OPTIONAL		CP	10.10.21
A	NEW ISSUE		CP	10.06.11
REV.	DESCRIPTION		BY	DATE
DESIGN	<i>q2</i>	DART AEROSPACE USA, INC		
DRAWN	<i>q2</i>	PORT HADLOCK, WA		
CHECKED	<i>MJ</i>	DRAWING NO.	REV. B	
MFG. APPR.	<i>N/A</i>	DSI 9526	SHEET 1 OF 4	
APPROVED	<i>MJ</i>	TITLE	SCALE	
DE APPR.	<i>MJ</i>	OEM WEARPLATE KIT	NTS	
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### **3.0 WEARPLATE REMOVAL**

The D119-646-451/-452 Wearplate Kits should be removed as follows:

- 3.1 Jack up the aircraft.
- 3.2 Unfasten all fastener hardware securing the wearplates and remove wearplates.
- 3.3 If the kit is being permanently removed, fill unused holes in the area of the D4133-041 Mid Wearplate, with AN3 or MS27039-1 hardware. Ensure the fasteners are installed with Sikaflex-241/-291, Proseal 890, or MIL-S-8802 Class B2 sealant.
- 3.4 Re-install OEM wearplates per the Aircraft Maintenance Manual.
- 3.5 Lower the aircraft.

### **4.0 WEARPLATE RE-INSTALLATION**

The D119-646-451/-452 Wearplate Kits should be re-installed as follows. Refer to Figure 1 of this service instruction for reference:

- 4.1 Jack up the aircraft. At the installer's discretion, remove skidtube from the aircraft per Aircraft Maintenance Manual to allow for easier installation of the wearplates.
- 4.2 Remove any existing wearplates as applicable.
- 4.3 Check for corrosion and mechanical damage on the bottom of the skidtube in accordance with the Aircraft Maintenance Manual and repair as required.
- 4.4 If installing replacement D4132-041/-042 Fwd Wearplates or D4134-041/-042 Aft Wearplates, temporarily locate the wearplates on the skidtube and transfer drill Ø0.343" from the saddle to the inboard wearplate tab.
- 4.5 Install the D4132-041/-042, D4133-041, D4134-041/-042, and qty(3) D4135-1 Wearpads as shown in Figure 1 using AN3C hardware as shown. Fasten the fwd/aft wearplates to the saddle using existing hardware. It is recommended that the fasteners are installed with Sikaflex-241/-291, Proseal 890, or MIL-S-8802 Class B2 sealant.
- 4.6 Seal wearplates using Sikaflex-241/-291, Proseal 890, or MIL-S-8802 Class B2 sealant as required.
- 4.7 Re-install modified skidtube (if removed) on aircraft per Aircraft Maintenance Manual. Lower the aircraft.

DESIGN	97	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	97		
CHECKED	b	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9526	SHEET 2 OF 4
APPROVED	M	TITLE	SCALE
DE APPR.		OEM WEARPLATE KIT	NTS
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## 5.0 PARTS LIST

QTY -451	QTY -452	PART NUMBER	DESCRIPTION
X		D119-646-451	WEARPLATE KIT, OEM LH
	X	D119-646-452	WEARPLATE KIT, OEM RH
1		D4132-041	WEARPLATE, FWD LH
1		*D4132-3	GASKET (BONDED WITH 3M 1300/1300L)
1		D4132-042	WEARPLATE, FWD RH
1		*D4132-3	GASKET (BONDED WITH 3M 1300/1300L)
1	1	D4133-041	WEARPLATE, MID
1	1	*D4133-3	GASKET (BONDED WITH 3M 1300/1300L)
1		D4134-041	WEARPLATE, AFT
1		*D4134-3	GASKET (BONDED WITH 3M 1300/1300L)
1		D4134-042	WEARPLATE, AFT
1		*D4134-3	GASKET (BONDED WITH 3M 1300/1300L)
3	3	D4135-1	WEARPAD
20	20	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
54	54	AN3C5A	BOLT
54	54	NAS1149CO332R	WASHER

\* denotes that part is included in assembly above

## 6.0 WEIGHT AND BALANCE

The following weight and balance information is for the Dart D119-646-451/-452 kits only. The weight and balance of the wearplates removed are the responsibility of the installer.

Installation	Weight	LONGITUDINAL		LATERAL	
		Arm	Moment	Arm	Moment
D119-646-451 WEARPLATE KIT, LH	10.8 lb 4.9 kg	117.7 in 2.99 m	1271 in lb 14.7 m kg	-39.4 in -1.00 m	-426 in lb -4.9 m kg
D119-646-452 WEARPLATE KIT, RH	10.8 lb 4.9 kg	117.7 in 2.99 m	1271 in lb 14.7 m kg	+39.4 in +1.00 m	+426 in lb +4.9 m kg

DESIGN	QP	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	QP		
CHECKED	✓	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9526	SHEET 3 OF 4
APPROVED	#	TITLE	SCALE
DE APPR.	#	OEM WEARPLATE KIT	NTS
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